SURVIVOR®

Operating Instructions

STREAMLIGHT®

OPERATING INSTRUCTIONS FOR STREAMLIGHT SURVIVOR®

Thank you for selecting the Survivor, a truly remarkable portable light. As with any professional tool, reasonable care and maintenance of this product will provide years of dependable service.

Please read this manual before using your Survivor. It includes important safety and operating instructions and should be saved. **Flashlight must be charged before first use.**

The Survivor® is suitable for use in non-hazardous locations and the following hazardous locations*:

- For Div. 1 Labeled Product: Class I Div. 1 Groups C & D Temp Code T3C (U.S. Only)
  Class I Div. 2 Groups A, B, C, D Temp Code T3C
  Class II Div. 2 Groups C & D Class III Temp Code T6
- For Div. 2 Labeled Product: Class I Div. 2 Groups A, B, C, D Temp Code T2
  Class II Div. 2 Groups C & D Class III Temp Code T4

*See product label for the specific ratings for the unit you have.

SAFETY

A. SAVE THESE INSTRUCTIONS. This manual contains important safety and operating instructions for your Survivor and charger.

B. Before using the battery charger, read all instructions and cautionary markings on the charger.

C. Don't abuse the cord. Never carry charger by cord or yank it to disconnect the cord from a receptacle.

D. Plug AC charger directly into an electrical outlet. Do not use an extension cord.

E. Do not operate a damaged charger. Have damaged cords or plugs replaced immediately.

F. Do not put any metal objects on to the charging terminals located in the charger holder. Although there is no electrical shock hazard, this action could cause a burn injury.

G. Remove Survivor from charger holder before attempting any routine cleaning or maintenance. Do not try to repair the unit or charger yourself. Take it to a qualified service facility or return it to the factory.

H. Use only Streamlight battery pack #90337 (Div. 1) or 90338 (Div. 2). The product's hazardous locations approval is valid only with the appropriate Streamlight battery. See the product label for the specific battery required for your light. Do not open battery, dispose of in fire or short circuit – may ignite, explode, leak or get hot causing personal injury.

I. A small leakage of liquid from the battery cells may occur under extreme usage or temperature conditions. This does not necessarily indicate a failure. However, if the outer case seal is broken and the leakage gets on your skin:

1) Wash promptly with soap and water.
2) Neutralize with a mild acid, such as lemon juice or vinegar.
3) If battery liquid gets into your eyes, flush them with clear water for a minimum of ten (10) minutes and seek immediate medical attention. (Medical note: The liquid is a 25 -35% solution of potassium hydroxide.)

J. Do not charge in potentially hazardous locations.

K. **CAUTION:** The Survivor's Xenon bulb is pressurized. Wearing safety glasses is recommended during replacement. The bulb gets extremely hot. Do not touch a lighted bulb with your bare fingers. Use only lamp assembly #90320 (Div. 1) or 90314 (Div. 2). The product's hazardous locations approval is valid only with the appropriate Streamlight lamp assembly. See the product label for the specific lamp assembly required for your light.

L. Do not attempt to repair or replace any components in potentially hazardous locations.

CHARGER DESCRIPTION AND MOUNTING

There are two basic charger options, FAST CHARGERS [one (1) hour recharge] and the STEADY CHARGER [ten (10) hour recharge]. FAST CHARGERS have either a DC cord or an AC transformer wired directly into a strain relief on the charger housing. The STEADY CHARGER has four (4) interchangeable AC and DC power cords which allow connection to a variety of AC and DC power sources. The AC cords are terminated with a plug-in wall charger. All PIGGYBACK CHARGERS charge the spare battery at a steady rate only.

FAST CHARGERS
#90011 AC 120V AC 60 Hz
#90012 DC #1 12V DC w/cigarette lighter plug
#90013 DC #2 12V DC Direct Wire

PIGGYBACK™ CHARGERS
#90111 AC 120V 60 Hz
#90112 DC #1 12V DC w/cigarette lighter plug
#90113 DC #2 12V DC Direct Wire

STEADY CHARGER AND CORDS
#90010 Plug-In Charger/Holder
#22311 120V AC 60 Hz cord
#21725 230V AC 50-60 Hz cord
#22051 12V DC w/cigarette lighter plug cord
#22050 12V DC Direct Wire cord

PIGGYBACK™ STEADY CHARGERS
#90110 Plug-In Charger/Holder

WARNING: Use only genuine Streamlight Survivor charger holders and cords. DO NOT remove the transformer from an AC FAST CHARGER and connect it to a DC power source, the charger will be destroyed.

Mounting the Charger

All chargers are designed to be used in any position mounted or not. If mounted, decide on a convenient location and make sure there is enough clearance to retrieve the flashlight. The charger holder itself can be used as a template to mark the location of the mounting holes. Mount the charger securely with appropriate hardware to the selected mounting surface. The charger can then be connected to an appropriate power source. The chassis of all Survivor chargers is electrically isolated and may be mounted to any surface, including vehicles with negative or positive ground chassis.

FAST CHARGER or STEADY CHARGER AC systems may be used unmounted or mounted suitably near an AC power outlet of proper voltage.

VEHICLE INSTALLATIONS

IMPORTANT: Before making electrical connections in a vehicle, keep in mind that a shorted auto battery can deliver hundreds of amperes of current which can easily start a fire. Make all connections with insulated solder lugs or connection posts intended for such service.

DC Fast Charger

For maximum flashlight battery life, connect the DC charger directly to the 12V vehicle battery or to the unswitched side of the ignition switch. This will minimize unnecessary charge cycles which would be initiated each time the ignition switch is turned on. DC FAST CHARGERS charge the battery quickly but draw a minimum of current after charge.

The DC #1 charger (cigarette lighter plug) is offered for those who want fast vehicle charging but want to avoid a permanent installation. If at all possible, use a cigarette lighter socket that is connected to the unswitched side of the ignition switch.

The DC #2 charger (direct wire) is offered for those who want to permanently mount a Survivor in a vehicle. Connect the wires to the vehicle battery or to the unswitched side of the ignition switch through a 5 amp fuse; slow-blow is best.

Multiple DC #2 installations should be connected as above but using a separate fuse for each light.

The DC FAST CHARGER systems do not draw any current when the light is not inserted in the charger.

DC Steady Charger

This charger is offered for those who have no requirement for fast charging. It is available with two (2) plug-in power cords: a cigarette lighter plug or direct wire. The charger can be connected directly to the vehicle battery or in the unswitched side of the ignition switch if the vehicle is operated every few days. If the vehicle does not operate for periods of longer than a few days or multiple installations are planned, the charger(s) should be connected to the switched side of the ignition or master power switch; the vehicle battery could also be connected to a supplemental charging system.

Each charger should be connected through a 1 amp fuse; slow-blow is best. Multiple installations should use a separate fuse for each charger. Each STEADY CHARGER with a light inserted continuously draws about .2 amperes while one without a light inserted draws no current. PIGGYBACK STEADY CHARGERS draw up to .4A.

Vehicle Polarization

The chassis on most vehicles is negative polarity. In this case, the charger's striped lead should be connected to the output side of the fuse. The unmarked negative lead should be connected to the chassis.

If the chassis of the vehicle is positive, the striped lead of the charger should connect to the chassis and the unmarked lead should go to the output side of the fuse.

CHARGING AND USING THE LIGHT

The Survivor should be fully charged before use. Several charge and discharge cycles are necessary to achieve full battery capacity. The Survivor is designed to be left on charge continuously between uses. This insures that the light is always ready for use.

Fast Chargers

When the light is slipped into the charger, the red charge light will glow indicating that the battery is being charged at the fast rate. When fully charged (an hour or less), the red light will go out and the green light will come on. The battery will then be trickle charged as long as power is applied to the charger. Both lights should go out when the flashlight is removed from the charger. Reinsertion of the light starts a new charge cycle.

Best battery life will be achieved if the battery is fast charged in moderate temperatures. Fast charging at low temperature may cause the battery to permanently lose some capacity. For this reason, the DC FAST CHARGER is equipped with a temperature sensing system which automatically adjusts the current for low temperature charging. This system works best when the charger and the light are close to the same temperature. Avoid taking a Survivor from a cold environment such as 40°F or lower and placing it into a warm charger. Allow the Survivor to warm up for about a half hour before placing it in the charger. If the light and charger are colder than 40°F, the charge indicators will not come on until the system warms.

Steady Charger

When the light is slipped into the charger, the red light will glow indicating that the battery is being charged at a steady rate. Charging will continue as long as power is applied to the charger. The light may be continuously charged in the steady charger at any temperature above 0°F. The light should go out when the flashlight is removed from the charger.

PiggyBack Charger

When the battery is slipped into the charger, the red light will glow indicating that the battery is being charged at a steady rate. Charging will continue as long as power is applied to the charger. The battery may be continuously charged in the PiggyBack charger at any temperature above 0ºF. The light should go out when the battery is removed from the charger.

Operation

After the light has been charged, it may be used freely. If possible, avoid running the battery down to the point where the lamp begins to significantly dim. There is no need to regularly discharge or "condition" the battery to erase so called memory. This effect occurs rarely and only under special conditions.The switch is located on the top of the light. Swing the switch lever towards the front of the light for "on," towards the rear for "off."

To use the light in a hands-free mode, simply slide or clip onto a pocket, belt or strap or use the built-in lanyard hole with a ring on the lanyard.

MAINTENANCE

Cleaning

Clean the light with mild soap and warm water. Avoid harsh detergents, abrasives and solvents that could damage the plastic. For best performance, keep the lens clean. The light, battery and charger can be stored long term in a cool, dry location for up to five (5) years without harm.

Lamp Replacement

The lamp assembly may easily be replaced. Determine the correct replacement part for your light as stated on the product label. Use only lamp module #90320 (Div. 1) or 90314 for Div. 2 product (see warning). Make sure that the switch is in the "off" position. If the bulb is warm allow it to cool. Unscrew the facecap assembly from the light. Remove the lamp assembly from the light. Insert the new lamp assembly straight into the housing, being careful not to bend the contacts or the bulb pins. Be careful not to touch the bulb. It is recommended to use finger cots or a clean tissue when installing the new lamp assembly. Replace the facecap; focus is adjustable for optimum spot. Do not over-tighten. The Survivor is again ready for use.

Battery Pack Replacement

The battery pack of the Survivor can be expected to give 500 to 1000 complete charge/discharge cycles. When new, the battery should yield 90 to 100 minutes of continuous run time, more with intermittent use. Should the performance decrease significantly with age or use, you may want to replace the battery pack.

To replace the battery; release the latch or, for Div. 1 product, remove the two stainless steel pins at the bottom of the light. The pins can be driven out from one side to the other with an .090" punch. Hand pressure on the punch and base is generally sufficient to remove the pins. Flip open or remove the base, note orientation with the battery. The old battery will then slip out. The new pack can now be inserted. It is keyed; the base will only close if the battery is inserted with the proper orientation. Do not force the base closed. Hold the battery base firmly seated against the battery housing and at the same time secure the latch or replace the pins fully in their holes. Remember to use only Streamlight battery pack #90338 (Div. 2) or 90337 (Div. 1). See the product's label for the specific battery pack required for your particular light (see warning).

WARNING: Be sure to use only genuine Streamlight® replacement parts. The Survivor is approved for use in hazardous locations only when Streamlight lamp assemblies and battery packs are used. Important: To assure product safety and reliability, repairs other than lamp or battery replacement should be performed at the Streamlight factory. Always use Streamlight approved replacement parts, substitution may invalidate underwriter's approval.

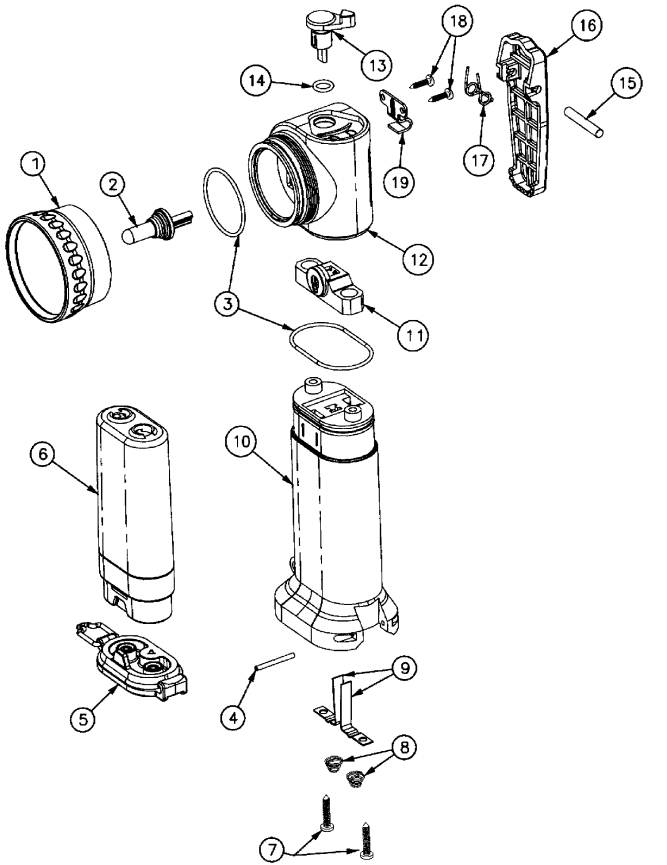
NOTE: The rechargeable battery contained in this product is recyclable. At the end of its useful life, under various country and state laws, it may be illegal to dispose of this battery in the municipal solid waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

SURVIVOR® REPLACEMENT PARTS

Item No.	Qty	Part No.	Description
* 1	1	900330	Facecap Assembly
* 2	1	90314	Lamp Assembly; Div 2
		90320	Lamp Assembly; Div 1
3	2	900044	O-Ring, Bezel and Housing
** 4	2	900042	Pin, Battery Retaining
* 6	1	90338	Battery Pack Assembly; Div 2
		90337	Battery Pack Assembly; Div 1
* 5	1	903039	Base Assembly w/Latch; Div 2
		903039 – 1	Base Assembly; Div 1
7	2	900046	Screw, Housing
8	2	900038	Spring, Battery Contact
9	2	900022	Contact, Switch Angle
10			N/A
11			N/A
12			N/A
13	1	900026	Switch
14	1	900043	O –Ring, Switch
15	1	900310	Pin
16	1	900307	Clip
17	1	900309	Double Torsion Spring
18	2	900047	Screw, Clip
19	1	900308	Hinge, Clip

* Items are not interchangeable. Failure to use appropriate item will compromise product safety and invalidate approval rating. See product label for correct lamp and battery.

** 1 pin required for UL listed Survivor Div. 2 lights only.



UL NFPA

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IMPORTANT – Be sure to use genuine **Streamlight** replacement parts.
WARRANTY REGISTRATION: To register the warranty on your Streamlight, complete the card enclosed and mail to Streamlight, Inc., within ten (10) days of purchase. When returning product for warranty repairs, please provide receipt or other proof of purchase.
PRODUCT USE: The Streamlights are intended for use as high intensity, heavy duty, rechargeable, portable light sources. Use of the Streamlights for any purpose other than light sources is specifically discouraged by the manufacturer.

The rechargeable battery contained in this product is recyclable. At the end of its useful life, under various country and state laws, it may be illegal to dispose of this battery in the municipal solid waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

WARRANTY STREAMLIGHT SURVIVOR®
Streamlight makes no express warranties other than those expressly provided herein. Streamlight does not make, and hereby expressly disclaims, any implied warranties, including warranties of merchantability or fitness for a particular purpose, except to the extent that implied warranties may not be disclaimed under applicable law. To the extent any such implied warranties may not be disclaimed under applicable law, the duration of such implied warranties shall be limited to the minimum period required by applicable law. Streamlight's responsibility under all warranties, both expressed and implied, shall be limited to the repair, replacement or refund of the purchase price of any products covered by such warranty. Streamlight shall, in no event, be liable for any other damages, including consequential or incidental damages. Some jurisdictions my not allow the waiver of or limitations on the scope or duration of implied or expressed warranties or on the exclusion of consequential or incidental damages, in which case the above waivers, limitations or exclusion may not apply to you.

WARRANTY
Your Survivor, including the case, switch and all internal components, but excluding the lamp and battery pack has a Limited Lifetime Warranty from the date of purchase. In any country or jurisdiction where specific limitations are placed on limited lifetime warranties, Streamlight will honor a 10-Year Limited Warranty. Should your Survivor fail to operate for any reason, return it to the factory along with your proof of purchase. Streamlight will repair or replace the warranted defective parts without cost and return the unit to you. The battery pack is warranted for a period of one (1) year in accordance with the above terms. When returning the unit for service, please include $5.00 for shipping and handling.

WARRANTY REGISTRATION CARD
Complete and return the enclosed warranty registration card within ten (10) days of purchase to register your warranty. Retain your receipt or any proof of purchase. Failure to return the warranty card will invalidate the warranty and service coverages described herein.

Serial #_____ Date of Purchase _____
This warranty gives you specific legal rights and you may also have other rights.

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